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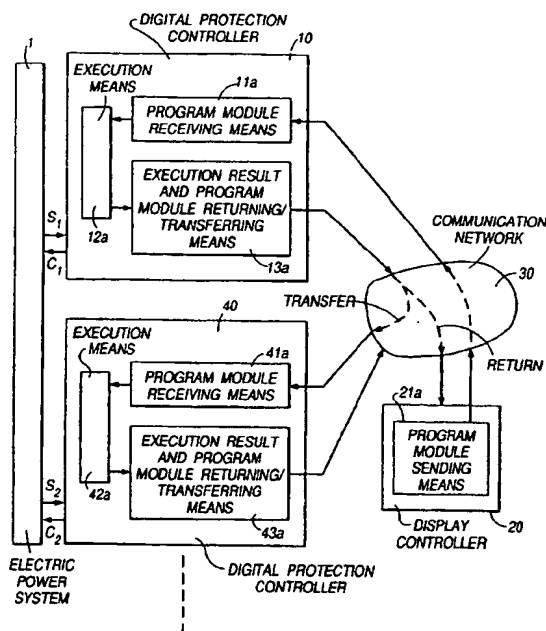
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**(54) Electric power control system**

(57) An electric power system protection and control system, including, a plurality of protection controllers, each for executing protection and control of an electric power system by inputting a status quantity of the electric power system and for converting the status quantity into digital data, and a display controller connected to each of the protection controllers via a communication network, for displaying and controlling an operation and status of each of the protection controllers for monitoring. The display controller is provided with a program module sending unit for sending out a program module corresponding to contents for display control in the display controller to one of the protection controllers via the communication network, respectively. Each of the protection controllers is provided with, a program module receiving unit for receiving the program module from the display controller or another one of the protection controllers via the communication network, an execution unit for executing the received program module, and a transfer unit for transferring an execution result by the execution unit or the program module stored in the protection controller to the display controller or another one of the protection controllers via the communication network.

**Fig.1****EP 0 853 367 A3**



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# EUROPEAN SEARCH REPORT

Application Number  
EP 97 30 9732

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
X	AMER P D ET AL: "MEASUREMENT MANAGEMENT SERVICE" COMPUTER COMMUNICATIONS REVIEW,US,ASSOCIATION FOR COMPUTING MACHINERY. NEW YORK, 1988, pages 360-367, XP000579980 ISSN: 0146-4833	1,20	H02J13/00 G05B19/042
Y	* the whole document *	2-19, 21-33	
Y	--- US 5 544 064 A (BECKWITH ROBERT W) 6 August 1996 (1996-08-06) * abstract *	2-19, 21-33	
A	--- US 5 162 986 A (FRALEY KRIS M ET AL) 10 November 1992 (1992-11-10) * abstract *	1-33	
A	--- PATENT ABSTRACTS OF JAPAN vol. 018, no. 338 (M-1628), 27 June 1994 (1994-06-27) & JP 06 080334 A (TOSHIBA CORP), 22 March 1994 (1994-03-22) * abstract *	1-33	TECHNICAL FIELDS SEARCHED (Int.Cl.6)
A	--- PATENT ABSTRACTS OF JAPAN vol. 017, no. 404 (E-1405), 28 July 1993 (1993-07-28) & JP 05 075628 A (FUJI XEROX CO LTD), 26 March 1993 (1993-03-26) * abstract *	1-33	H02J G05B G06F
L	-& US 5 822 532 A (MASAHIRO IKEDA) 13 October 1998 (1998-10-13) --- -/--		
The present search report has been drawn up for all claims			
Place of search <b>THE HAGUE</b>		Date of completion of the search <b>3 August 2000</b>	Examiner <b>Lampe, S</b>
<p><b>CATEGORY OF CITED DOCUMENTS</b></p> <p>X: particularly relevant if taken alone Y: particularly relevant if combined with another document of the same category A: technological background O: non-written disclosure P: intermediate document</p> <p>T: theory or principle underlying the invention E: earlier patent document, but published on, or after the filing date D: document cited in the application L: document cited for other reasons &amp; : member of the same patent family, corresponding document</p>			

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Application Number  
EP 97 30 9732

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
A	BOLAM D ET AL: "Experience in the application of substation co-ordinated control and protection with development trends in the standard control system open architecture" INSPEC, XP002138707 * the whole document * -----	1-33	
			TECHNICAL FIELDS SEARCHED (Int.Cl.6)
The present search report has been drawn up for all claims			
Place of search <b>THE HAGUE</b>		Date of completion of the search <b>3 August 2000</b>	Examiner <b>Lampe, S</b>
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

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**ANNEX TO THE EUROPEAN SEARCH REPORT  
ON EUROPEAN PATENT APPLICATION NO.**

EP 97 30 9732

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.  
The members are as contained in the European Patent Office EDP file on  
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03-08-2000

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 5544064	A	06-08-1996	NONE	
US 5162986	A	10-11-1992	NONE	
JP 06080334	A	22-03-1994	NONE	
JP 05075628	A	26-03-1993	US 5822532 A	13-10-1998

EPO FORM P0459

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82